SPECIAL ENGINEERING SERVICES ORGANIZATIONAL ANNOUNCEMENTS

Jim Caldwell, Vice President, Engineering Services, has recently announced several ES Organization changes.

RESOURCE OPERATIONS

Resource Operations has been split into the following functions, reporting directly to Jim Caldwell.

- **Engineering Services Education, R. L. Bari, General Manager**
- **Engineering Operations, R. D. DeGrote, Director**
- **Logistics Operations, K. E. Johnson, Vice President**

Facility Planning & Construction (FP&C) was formerly a part of Resource Operations and is now a part of the newly created Product Line Management organization.

PRODUCT LINE MANAGEMENT (PLM)

R. D. Kazda has assumed the position of General Manager, PLM. This new Engineering Services PLM organization has been created to:

1. Develop technical and business strategies for maintenance services
2. Coordinate the implementation of these strategies by developing product (or service) definitions
3. Encourage and pursue the development of more efficient maintenance technology and procedures
4. Measure the quality of our maintenance services to assure that we meet our objectives

The scope of PLM is worldwide. Major emphasis will be in the following business segments:

- **Facility Planning & Construction, D. L. Clark, General Manager**
- **OEM, H. B. Meeks, Director**
- **Repair Services, H. B. Meeks, Director**
- **Peripheral Systems/COMMA, G. M. Potratz, Director**
- **Data Systems/Syntonic, L. R. Eyler, General Manager**
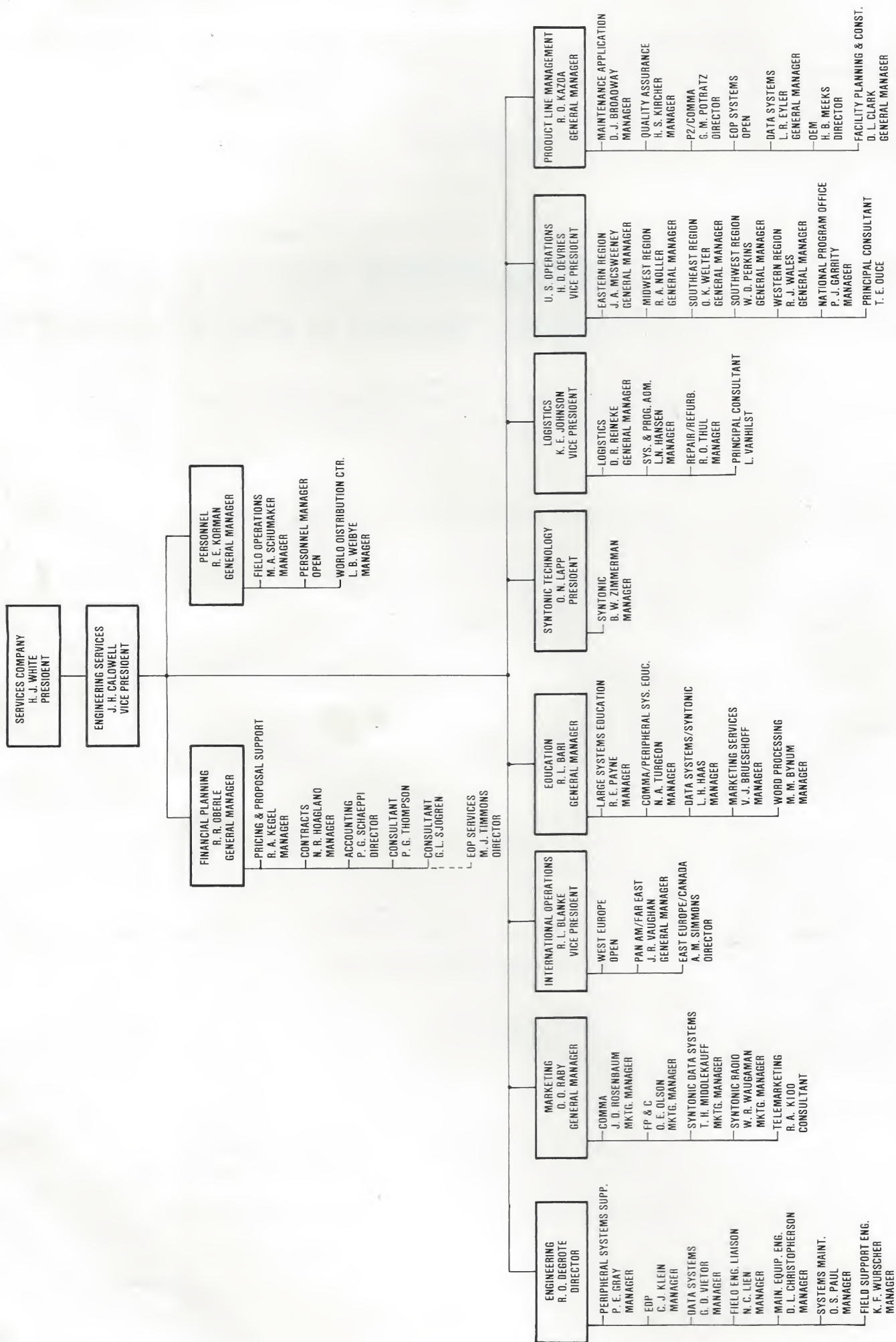- **EDP Systems, R. D. Kazda, Acting**

US OPERATIONS

H. D. DeVries has assumed the position of Vice President, US Operations replacing G. A. Giffin who has accepted the position of Vice President of Business and Manufacturing Systems in Operations Services.

The Data Systems/Syntonic segment of business function has been transferred to PLM.

See page two for the ES Organization Chart

ORGANIZATION CHANGES

SERVICES COMPANY
H. J. WHITE, PRESIDENT

ENGINEERING SERVICES
J. H. CALOWELL, VICE PRESIDENT

ENGINEERING — R. O. DEGROTE, DIRECTOR
- PERIPHERAL SYSTEMS SUPP. — P. E. GRAY, MANAGER
- EDP — C. J. KLEIN, MANAGER
- DATA SYSTEMS — G. D. VIETOR, MANAGER
- FIELD ENG. LIAISON — N. C. LIEN, MANAGER
- MAIN. EQUIP. ENG. — D. L. CHRISTOPHERSON, MANAGER
- SYSTEMS MAINT. — O. S. PAUL, MANAGER
- FIELD SUPPORT ENG. — K. F. WURSCHER, MANAGER

MARKETING — O. O. RABY, GENERAL MANAGER
- COMMA — J. O. ROSENBAUM, MKTG. MANAGER
- FP & C — O. E. OLSON, MKTG. MANAGER
- SYNTONIC DATA SYSTEMS — T. H. MIDDLEKAUFF, MKTG. MANAGER
- SYNTONIC RADIO — W. R. WAUGAMAN, MKTG. MANAGER
- TELEMARKETING — R. A. KIOO, CONSULTANT

INTERNATIONAL OPERATIONS — R. L. BLANKE, VICE PRESIDENT
- WEST EUROPE — OPEN
- PAN AM./FAR EAST — J. R. VAUGHAN, GENERAL MANAGER
- EAST EUROPE/CANADA — A. M. SIMMONS, DIRECTOR

EDUCATION — R. L. BARI, GENERAL MANAGER
- LARGE SYSTEMS EDUCATION — R. E. PAYNE, MANAGER
- COMMA/PERIPHERAL SYS. EDUC. — N. A. TURGEON, MANAGER
- DATA SYSTEMS/SYNTONIC — L. H. HAAS, MANAGER
- MARKETING SERVICES — V. J. BRUESEHOFF, MANAGER
- WORD PROCESSING — M. M. BYNUM, MANAGER

FINANCIAL PLANNING — R. R. OBERLE, GENERAL MANAGER
- PRICING & PROPOSAL SUPPORT — R. A. KEGEL, MANAGER
- CONTRACTS — N. R. HOAGLAND, MANAGER
- ACCOUNTING — P. G. SCHAEPPI, DIRECTOR
- CONSULTANT — P. G. THOMPSON
- CONSULTANT — G. L. SJOGREN
- EOP SERVICES — M. J. TIMMONS, DIRECTOR

PERSONNEL — R. E. KORMAN, GENERAL MANAGER
- FIELD OPERATIONS — M. A. SCHUMAKER, MANAGER
- PERSONNEL MANAGER — OPEN
- WORLD DISTRIBUTION CTR. — L. B. WEIBYE, MANAGER

SYNTONIC TECHNOLOGY — O. N. LAPP, PRESIDENT
- SYNTONIC — B. W. ZIMMERMAN, MANAGER

LOGISTICS — K. E. JOHNSON, VICE PRESIDENT
- LOGISTICS — D. R. REINEKE, GENERAL MANAGER
- SYS. & PROG. AOM. — L. N. HANSEN, MANAGER
- REPAIR/REFURB. — R. O. THUL, MANAGER
- PRINCIPAL CONSULTANT — L. VANHILST

U. S. OPERATIONS — H. D. DEVRIES, VICE PRESIDENT
- EASTERN REGION — J. A. MCSWEENEY, GENERAL MANAGER
- MIDWEST REGION — R. A. NOLLER, GENERAL MANAGER
- SOUTHEAST REGION — O. K. WELTER, GENERAL MANAGER
- SOUTHWEST REGION — W. D. PERKINS, GENERAL MANAGER
- WESTERN REGION — R. J. WALES, GENERAL MANAGER
- NATIONAL PROGRAM OFFICE — P. J. GARRITY, MANAGER
- PRINCIPAL CONSULTANT — T. E. OUCE

PRODUCT LINE MANAGEMENT — R. O. KAZOA, GENERAL MANAGER
- MAINTENANCE APPLICATION — D. J. BROADWAY, MANAGER
- QUALITY ASSURANCE — H. S. KIRCHER, MANAGER
- P2/COMMA — G. M. POTRATZ, DIRECTOR
- EOP SYSTEMS — OPEN
- DATA SYSTEMS — L. R. EYLER, GENERAL MANAGER
- OEM — H. B. MEEKS, DIRECTOR
- FACILITY PLANNING & CONST. — D. L. CLARK, GENERAL MANAGER

How I See It...

GOOD PERFORMANCE IS WORTH THE EFFORT

I recently had the opportunity to attend the awards banquet for the winners, and their spouses, of Control Data's Technical Excellence Award. Engineering Services had two winners--Diana Erickson and Mark Mudrak. Diana was recognized for the development of a special training module for our OEM sales analysts located at the World Distribution Center in St. Paul. Mark, who is a field CE located in Harrisburg, Pennsylvania, received his award for developing an innovative solution to the HDA problem associated with Fixed Module Drive (FMD) disks.

In addition to Diana and Mark, there were twenty-six other Control Data winners recognized for their outstanding contributions. During the awards ceremony, the accomplishments of each individual were outlined. It would be an understatement to say that their individual achievements are remarkable. Although these winners may represent the extreme, I think the rest of us can learn from them. For example, in almost every case the individual had to overcome obstacles or handicaps to reach his/her objective. In most cases, the accomplishment took months to achieve, some even years. This indicates that superior performance is a result of a long-term, sustained effort. Another common thread was that these individuals approached their assignments with a great deal of confidence, commitment, and enthusiasm. Each of us, on a day-to-day basis, are presented with opportunities to perform. The people who achieve excellence are those who recognize opportunities and commit themselves to reaching their goals.

Rewards for excellence come in many different forms. An obvious reward for good performance is the personal career growth that can result. Other, less visible rewards are recognition by peers, superiors, family, and the self-satisfaction that goes with knowing you have done a good job.

I hope that each of you will give some thought to your own goals and your performance toward meeting those goals. I believe the Technical Excellence Award winners would tell you that good performance is really worth the effort.

Jim Caldwell

Vice President
Engineering Services

SPIRIT MAGNETIC TAPE TRANSPORTS ANNOUNCED

by G. J. Roberson, Senior Support System Engineer, CPI Products Support

Jay Roberson inspects one of the newly designed 9214X Magnetic Tape Transports.

The 9214X series Spirit Magnetic Tape Transports are low speed, single capstan, tension arm transports that were designed to meet the requirements of small system users in the OEM marketplace. The 9214X series offers customers standard nine track recording, with tape speeds that range from 18.75 to 45 inches per second. The recording density for a nine track unit is 1600 characters per inch phase encoded, or 800 characters per inch (non-return zero inverted) in a dual mode configuration.

Tension arm transports provide quiet operation with low power consumption. The input power for these units is 120 volts, 60HZ, 300 watts. Also, units are being developed for 50HZ operation in the foreign marketplace. These devices will conform to UL, CSA, IEC, and VDE standards.

Other features of the 9214X series tape transports include:

- Standard 19 inch vertical or 24 inch horizontal rack mounts

- Single large main electronics boards

- Dual blade tape cleaners

- Microprocessor controlled logic

- Forward and reverse read

- Microprocessor controlled maintenance aids

An optional formatter is available to support the tape subsystem. The formatter enables generation and reading of ANSI, IBM, and ECMA compatible tapes in both Phase Encoded (PE) and Non-Return to Zero Inverted (NRZI) modes. In addition, the formatter performs the basic functions of formatting data written on tape and decoding data read from tape. Error checking is performed on data read from the tape. The formatter can control from one to four tape transports within a single magnetic tape subsystem.

The 9214X series tape transports are currently in production, and are being shipped to a number of OEM manufacturers for incorporation into their computer systems.

by N. Smith, Project Manager, Australian Computing Center

Neville Smith

CYBERNET has grown very rapidly in Australia since 1968, when the first 3300 was installed. When the latest upgrade, a CYBER 170-760 became necessary, it also made good sense to consolidate the now widespread systems into a single computing center. As a result, we now have the Australian Computing Center (ACC), located 25 km from Melbourne. It was designed from scratch as a home for CYBERNET systems and will accommodate their predicted expansion well into the 1980s.

CYBERNET's operations in Australia were centered on three large systems--a 6600 in Sydney, and a CYBER 73 and a CYBER 74 in Melbourne, 750 km away. The two Melbourne systems were each in separate locations, but all three systems were tied together with CYBERLINK (a high speed data transfer package that allows files and jobs to be switched from machine to machine). Each system also had its own communications network. Together, these brought CYBERNET within reach of most of the population of Australia and New Zealand.

The task that CYBERNET brought to ES was major. They wanted to have the new CYBER 170-760, the CYBER 73, and the CYBER 74 all installed at the new center and an upgraded communications network brought into operation, without losing any processing time or impacting their users in any way. Engineering Services accepted the challenge and began planning the project early in 1980.

The job called for a great deal of cooperation from Telecom, the Australian government authority which provides telecommunication services throughout Australia. Telecom described the job as the biggest data network relocation they have ever attempted in Australia. In addition, the network in its finished form is the highest capacity, privately run data system in the country. It uses data links of up to 153.6K baud--the highest speed ever used for a data network here.

The engineering team involved in planning and executing the move included Neville Smith, Stuart Goodey, Ian McDermid, Peter Yip, Jack Dutkiewicz, and Dave Wulff. Peter Costolloe and Chris Midwinter attended to the complex problems of planning and coordinating the changes in the data network. Members of this team worked towards the consolidation throughout most of 1980.

Preparation, apart from the normal tasks, involved thorough Equipment Performance Standards (EPS) checks on all equipment that was to be shifted--especially equipment that had to be moved, tested, and brought back on line overnight. Other problems solved were finding a way to ship CYBER channel boxes, and finding the quickest way to switch 20 active channels from a CYBER 73 onto a CYBER 74 (swapping the channel boxes achieved this).

The plan involved four phases. Phase one was the installation of the new 170-760, and transfer of the NOS communications and processing lead to this system from the CYBER 73. On the weekend of cutover, the CYBER 73 was shut down on Friday night and all its tapes, files, and communication equipment was transferred to the new site under police escort. Following overnight installation of the communication equipment, the weekend was spent in hardware and software testing and reloading of files. The system was available to CYBERNET users at eight a.m. Monday, meeting a date that had been set six months earlier.

Phase two involved transferring the CYBER 74's lead to the CYBER 73, after moving this system out of the new center. CEs began dismantling

The Australian Computing Center is located 25 kilometers from Melbourne.

the CYBER 73 and all its peripherals the day NOS went live on the 760. After two weeks of reinstallation and testing, the phase two cutover took place. Again, this was a Friday night shutdown of the CYBER 74 and a frantic night of packing, moving, installing, and testing followed. This was necessary so that at noon on Saturday a 24 hour file reload could commence before this system came live on Monday morning carrying the SCOPE processing load.

Phase three involved deinstallation of the CYBER 74, reinstallation at the new center, and finally swapping this mainframe back into the SCOPE system to replace the CYBER 73. Movement had to occur on a Sunday since the earlier location of the CYBER 74, on the sixth floor of an inner city building, involved extracting the mainframe through a window by crane.

Meanwhile, in Sydney, two CYBER 18s were brought into use as high speed remote batch terminals--linked directly to the new computing center with high speed links.

Back at the Australian Computing Center, engineers were still busy installing the first 500K of Extended Semiconductor Memory (ESM) on the CYBER 73.

Right now, the 900 square metre (9250 square foot) computer room is about three fourths full with three large mainframes, 27 tape units, 60 disk drives, 12 multiplexers, and 20 tape and disk controllers. All the paper tape, punched card, and printer equipment is housed in an adjacent room. All this equipment is interconnected with 1000 logic cables.

Without changing the floor plan, allowances have been made to increase the equipment to 100 844s, 40 tape units, another 170-760, and 1.5 megabytes of ESM.

This multi-phased move was a real challenge to our organization and represented one of the largest equipment relocations ever attempted in Australia. A key element was the need to keep CYBERNET continuously available to its many users throughout Australia. We did this despite many complexities and tight time deadlines. All of the engineering staff involved deserve a great deal of credit.

Australia FP&C . . .
NEW CYBERNET CENTER PLANNED

by G. B. Corcoran, Manager, FP&C Australia

The Australia Facility Planning and Construction operation, along with CYBERNET operations management, began the task of planning a new CYBERNET computer center in October 1977. From that time to the middle of 1979, a number of conceptual plans were prepared and discussed plus various alternatives examined. These included cost analysis of preparing existing building space to accommodate further machines both within current Control Data facilities, and leased space elsewhere in the city of Melbourne or Sydney. Finally, the decision was made to proceed with building a new computer facility. It would be designed to contain five large Control Data mainframes, provide office space for operations staff, and allow for growth in the computer area.

From mid 1979 to the end of 1979, the FP&C team worked closely with a firm of architects to prepare final tender drawings. These were issued in December 1979, and building companies bid on the construction of the new facility.

The design and specification of the complete facility was to be prepared in less than two months. The FP&C department estimated that approximately 1800 man hours were required to prepare the design documentation, tender analysis, and project supervision for the entire project.

The successful building contractor was awarded a contract in early January 1980. The major criteria in the selection of the construction company was that the company could complete the building by mid August 1980, and that their quality of workmanship met Control Data's standards.

The computer room has an access flooring system which allows total flexibility within the room for the distribution of air conditioning and other services.

The building services consist of multiple chilled water units and cooling towers, which provide the condensing medium for the computer center and office block. The total air conditioning system is a fully automatic system which will allow failures

Gary Corcoran

in the plant to be indicated and automatic sequencing to back up the plant upon failure.

Electrical power is provided to the building via a dedicated 22 kv supply entering a 1000 kva substation located within the confines of the building plant room. This is further transformed to provide 415/240V (Australian standard power) general power for the services within the building and this will be backed up by a 900 kw turbine electrical generator. The electrical distribution system employed within the computer room is such that each computer system is isolated from others by a dedicated switchboard and control.

The fire protection services incorporated in the new building employ three types of detection and protection. The main office area is protected by a wet pipe sprinkler system, the computer room and major plant room via a pre-action sprinkler system, and the underfloor space is protected by a Halon 1301 system.

All of these security measures are monitored at a commercial security service depot which has the capability of contacting police, fire brigade, or other personnel immediately as alarm conditions are received.

Overall, the attempt is to provide a center which will provide uninterrupted operations for CYBERNET and its joint tenants at the center-- PLATO and CALL/370. The FP&C operation in Australia was one of the many departments involved in bringing this mammoth task to a successful completion. They shared the elation of all groups involved when the building was completed right on schedule.

REVOLUTION RESOUNDS IN THE ROCKIES

by K. E. Jacobson, Manager, Rocky Mountain Resource Center

In the twelve months ending the first of July, a revolution occurred in the Rocky Mountain District's large systems base. During that period, the installed base grew from 14 to 21 systems--mostly based on the 170-700 series of CPUs. Many existing customers outgrew their older 6000 systems and replaced them with 700s. Four major, new customers were added to the base providing significant revenue growth and market penetration--unequaled in our history.

This revolution also generated the largest challenge ever faced by the district in the areas of education, logistics, and productivity. In the early part of 1979, we knew that the coming revolution in our business would not allow us to continue to do *business as usual*. Significantly lower maintenance prices would mean financial difficulties if nothing were done to control rising costs. Target areas were identified that would provide the needed controls, while maintaining traditional quality of service objectives.

In education, our major need was to train the 43 large systems CEs/EICs, then in the district, to maintain the new product lines. Sending just half of this work force to traditional classroom training was estimated to require a total of seven to ten man-years.

We could not afford to take this resource out of the district and still continue to service our customers. A number of solutions were used including modified or accelerated courses for CEs with experience on similar devices. Some traditional courses were employed, but the bulk of the training was done in the district using qualified CE instructors. We are still working to build up our level of training, but are past the critical point.

With logistics, the simplest solution would have been to order the recommended Original Model for Inventory Control (ORMIC) spares as each system was scheduled for delivery. We decided to order complete single sets of logic modules for each product to be installed, and place them in kits. In addition, we identified very high use items and ordered these for each product location. The net result was that we met our service objective.

Also, we have managed to improve productivity. Not very long ago, the addition of seven major systems would have required us to add from seven to fourteen additional personnel, since quality of service remained our number one objective. But, the introduction of Remote Technical Assistance (RTA) and Concurrent Maintenance Library (CML) were major factors in increasing productivity, and we see great promise for the future.

Our revolution is continuing with four more major installations. We expect to be just as successful in meeting the challenges of these additional systems as we were in meeting the challenges of the past.

Successful business revolutions require many elements--good products, favorable business climate, and good people. Of these, the most important is good people, and we have them in the Rockies. Our success this past year and our promising future, are mainly due to the ability of our customer engineers and their willingness to meet the challenge of change with enthusiasm and dedication.

CERs PLAY A VITAL ROLE

Quality Corner

by W. C. Gaugert, Quality Administration, Quality Assurance

Engineering Services field personnel must be dedicated to provide high quality system/equipment de installations, as well as quality installation and maintenance. Successful completion of this activity presents attractive benefits to the corporation--equipment field transfers with minimal problems, time delays, refurbishment costs, and so on.

The Condition of Equipment Report (CER) plays a vital role in the field transfer business. A CER on terminated equipment is as important and essential to the corporation as Quality Assurance (QA) tags are to field personnel on new or refurbished equipment.

Generation of CER reports is the responsibility of ES field personnel. As such, each CE must be fully aware of equipment removal requirements, and ensure that each action is properly completed in a timely manner. ES field personnel are Control Data quality representatives.

The ingredients to quality deinstallations and CERs are:

• Quality maintenance of equipment while on site

• Attention to detail during deinstallation--compliance to ES policies, EPS and/or CAMS

• Accurate/timely distribution of CER

Deinstallations/field transfers occur almost daily. Let's do it right the first time and save ourselves, and our customers a lot of problems.

NEW BAND PRINTERS HAVE MICRO CONTROLLERS

by M. F. Sutton, Support System Engineer, Printer Products Support

Control Data Printer Products Division has recently begun shipping the initial production of Microprocessor Controller Band Printers to OEM users. In the very near future, this state of the art logic enhancement will be featured in all band printers manufactured by this division in Rochester, Michigan.

The printers are driven by a variety of microprocessor controller interfaces including the Northern Telecom common interface, and a data products compatible interface. Also, there are many other interfaces available through a special adapter and exclusive interface boards, which are used in conjunction with the microprocessor controller interfaces.

These newly developed controller boards incorporate both of the previous controller boards plus the Electronic Vertical Format Unit (EVFU) board (optional) and the adapter board (optional).

For improved diagnostic detection, these printers have a two digit fault/status display which is exercised by the controller. This Light Emitting Diode (LED) display is mounted on the control panel for easy observation. At present, the microprocessor detects and displays status for more than four dozen states, with capabilities of up to 99.

The Microprocessor Band Printers differ from the present band printers mainly by the controller Printed Circuit Board (PCB) and the fault display on the control panel. However, the unique options available create the following differences:

TOWEL GATE

There is a new towel ribbon gate with skew control available, as an option, for this printer. With the towel gate, there is an added PCB referenced as the skew board. Along with ribbon fold detect, the skew board also controls the nine volt clamp driver, pickup delay, and blower control. Other design enhancements featured with the towel ribbon gate include--two piece metalized ribbon shield, operator gate positioning for forms adjustment, one piece band pulleys, adjustable vespel platen, newly designed electromagnetic paper clamp system, two speed blower, and more.

POWER STACKER

The new power stacker is available, as an option, to all PBS 360/720 and PB 1130 band printers. The power stacker is a free standing unit which is located at the rear of the printer. All electrical interconnection is via Input/Output (I/O) connectors to the printer. This stacker is similar in operation to the GJ 105 power stacker used on train printers.

These new features, along with future developments, will contribute strongly to increased Mean Time Between Failures (MTBF) and Mean Time To Repair (MTTR) of the band printer family.

CHANGE--IT'S A WAY OF LIFE

by H. F. Mattson, Manager, National Program Office, Western Region

Someone once said, the only thing constant is change. This is still relevant, and what group experiences change in their job environment more than the field technicians? What they work on, where, with what tools, and under what conditions seems to be revised constantly. The field technicians job is undergoing constant evolution, and if one looks back just ten years, the change is mind boggling. We no longer have just the traditional large sites producing a lot of revenue and a few small sites producing a little revenue. Today the homogeneity is fast disappearing, and though we are still selective of our business, we are far less discriminatory. Instead of our million dollars being made up of $10,000.00 from 100 customers, sometimes the million dollars will be $100.00 from 10,000 customers.

To illustrate, just about a year ago the decision was made to venture into the business of repairing microprocessor based personal computers, and an agreement for repair service of the ATARI personal computer line became effective. What a change!

Now our resource centers are involved with a consumer product. Walk in customers, warranty decisions, cash to be handled, and credit card transactions all have become a part of their job. This is not the traditional resource center modus operandi! Yet, each of the resource centers involved --we started with 15 and now have 30 --approached the challenge with a positive attitude and have been continually supportive. Our success in this venture came about because all involved Engineering Services people throughout the country took this
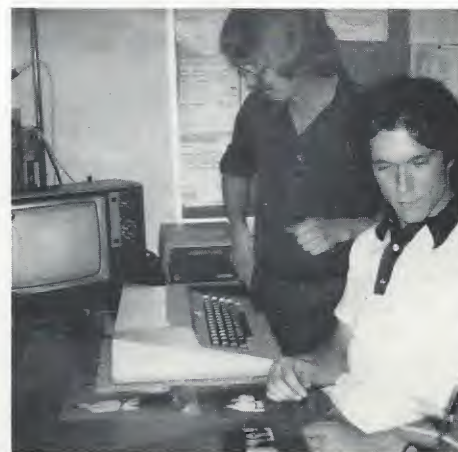
CEs Don Scherbarth (left) and Jeff Lopez (right) repair an ATARI unit.

change in stride. They all seem to have one goal--give the best service possible. And, they are doing it.

This is just the beginning. The microprocessor has been characterized as a watershed invention. A watershed invention is defined as an invention which acts as a catalyst, producing drastic changes in how we live and work. Examples are the electric light, the telephone, and the automobile. To be involved in such a development from the beginning, is challenging and exciting. Engineering Services people in the field continue to prove that they thrive on change, challenge, and excitement in their work. I want to let all of the people involved in the ATARI repair know their can do/will do attitude is recognized and appreciated. With their support, Engineering Services has gained an enviable position in this new and fast developing facet of the total computer business. And, with their continued support, it will expand and grow.

EVERYBODY SELLS

"... Since I purchased an Atari 800 personal computer I have had dealings with CLAIRE EASTBURN, RICH MELROSE, and BOB GEISDORF. I would like to compliment them on their extraordinary friendliness and attention. They have all been exceptionally responsive and should be commended."

John F. Booth
Brea, California

"... The service performed by TOM ROBERTS is outstanding and deserves special commendation. It is rare to find a combination of technical competence and pleasant personality such as he possesses. On two occasions he has quickly resolved problems for me that had been left unresolved by other servicemen. Such competence deserves special notice."

Bruce E. Ressler
Department of Transportation
Cambridge, Massachusetts

"... Recently, GARY BARCLAY was temporarily assigned to Northwestern Bell to assist in correcting multiple hardware problems encountered with the IBM Plug Compatible Disk Drives. I want to take this opportunity to express my appreciation for his assistance. He is a prime example of the importance of service after the sale concept."

Alvin F. Kuper
District Staff Manager,
Data Communications
Northwestern Bell
Omaha, Nebraska

"... Recently, Sunstrand's Data Center was the number one site for Control Data 3380 Drives in Reliability Plus. I would like to congratulate JOHN CAMPBELL and KEN BOWE for their work and concern for our equipment."

Russ Moser
Operations Group Leader
Sunstrand Corporation
Rockford, Illinois

"... I would like to express my appreciation for the efforts ROGER PENCE and KEN AKSAMIT put forth for the Albany County elections. It is such community service that does you and your company proud."

Charles A. Folkner
Director, Division of
Computer Services
University of Wyoming
Laramie, Wyoming

"... We are very pleased with the performance of GERRY MANIA. He has been cooperative and pleasant in all of our dealings and we are confident in his ability. You are fortunate in having an individual of this type on your staff."

Edward E. Benson
Operations Manager
Decimus Corporation
Piscataway, New Jersey

"... In reviewing the support furnished by Control Data Corporation to the City of New York, I feel that the level of service provided was exemplary and should not go unnoticed. Both the City and Control Data were under extreme pressure to perform during the period of the Democratic National Convention. The coverage and professionalism exhibited by DICK AHREN, JIM CARTELLI, RALPH DeMASI, MAURICE GAITHER, KEN JONES, RICH LETTIS, NATHAN MONTEKIO, RICK MORRISSEY, KEN PETTY, and BRIAN SICKLES, contributed significantly to the success of the project."

A. Larry Reznick
Deputy Director
Office of Operations
The City of New York
New York, New York

ENGINEERING SERVICES PEOPLE ON THE MOVE...

- LaVONNE HANSEN has accepted the position of Manager, System Administration and Program Management, World Distribution Center. Her most recent position was Manager, Systems Support, World Distribution Center. She has been with Control Data thirteen years.

- H. BEN MEEKS has accepted the position of Director, OEM Business Office, ES Headquarters. His most recent position was Director, ES Repair and Refurbishment Operations, Terminal Road, St. Paul. He has been with Control Data fifteen years.

- GERRY POTRATZ has accepted the position of Director, Peripheral Systems/COMMA Business Office, ES Headquarters. His most recent position was Manager, ES COMMA/Peripheral Systems, Midwest Region. He has been with Control Data eighteen years.

- RAY THUL has accepted the position of Manager, Repair and Refurbishment Operations, Terminal Road, St. Paul. His most recent position was Manager of Operations, Terminal Road, St. Paul. He has been with Control Data twenty years.

CONTROL DATA CORPORATION

ENGINEERING SERVICES NEWS